

### REMARKS

Claims 1-12 were pending. Claims 1-10 and 12 were rejected and Claim 11 objected to. Claims 1, 7 and 12 have been amended. Support for the amendments may be found in the Specification as filed at least in paragraphs [0109] and [0110]. No new matter has been added. Thus, after entry of this amendment, Claims 1-12 are currently pending. Reconsideration is respectfully requested based on the following remarks.

### Examiner Interview

Applicants thank the Examiner for the interview on February 15, 2011, and for indicating that the 112 rejection of Claim 2 is withdrawn.

### Allowable Subject Matter

Preliminarily, Applicants thank the Examiner for indicating that dependent Claim 11 would be allowable if rewritten in independent form and to include all of the limitations of the base claim and any intervening claims.

### Claim Rejections 35 U.S.C. §112

Claim 7 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claim 7 was rejected because “it is unclear how the multiplexer is changing the path of the signals going to the memory, when the signals are already stored in the memory”

(Office Action, page 2). Claim 7 is amended to remove the recitation “depending on the first image signals and the second image signals the memory unit.”

As such, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §112, second paragraph.

Claim Rejections 35 U.S.C. §103

Claims 1, 2, 3, 5, 6, 10 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Greier (U.S. Patent Publication No. 2002/0149598), herein referred to as “Greier”, in view of Bae (U.S. Patent No. 5,808,706), herein referred to as “Bae.”

Claim 4 was rejected under 35 U.S.C. §103(a) as being unpatentable over Greier and Bae in view of Lee (U.S. Patent Publication No. 2002/0180676), herein referred to as “Lee.”

Claims 7-9 were rejected under 35 U.S.C. §103(a) as being unpatentable over Greier and Bae in view of Terashima (U.S. Patent No. 7,023,413), herein referred to as “Terashima.”

Of the above-referenced claims, Claims 1 and 12 are independent. Accordingly, once allowability of Claims 1 and 12 is established, all claims depending therefrom are likewise allowable.

Claims 1, as amended, recites in part “wherein the pixels include upper and lower pixels adjacent to each other, the second subpixel of the upper pixel is capacitively coupled with the first subpixel of the lower pixel and upon application of the data voltages to the pixels, voltages charged in first and second subpixels of each pixel are different” (emphasis added). Claim 12, as amended, recites in part ““wherein the pixels include upper and lower

pixels adjacent to each other, the second subpixel of the upper pixel is capacitively coupled with the first subpixel of the lower pixel and upon application of the modified image signals to the pixels, voltages charged in first and second subpixels of each pixel are different"

(emphasis added)

The Specification states:

[0109] According to Relations 4 and 5, the lower subpixel is charged with a voltage higher than that charged in the upper subpixel if two capacitively coupled subpixels by a coupling capacitor have the same polarity, and vice versa.

[0110] As a result, when the data voltages applied to adjacent two pixel rows have the same polarity, a lower subpixel of an upper pixel is charged with increased voltage, while the lower subpixel of the upper pixel is charged with decreased voltage when the data voltages applied to adjacent two pixel rows have the opposite polarity. Accordingly, the voltages charged in an upper subpixel and in a lower subpixel of a pixel are different. (emphasis added) (Specification, [0109]-[0110])

In contrast, Bae only discloses that a pixel electrode in one cell is "capacitively coupled to a pixel electrode in another adjacent cell" (Bae, Col. 4, lines 30-31) and:

in the event a pixel electrode of a display cell cannot be properly loaded, the data (e.g., charge) from closely adjacent cells can be shared efficiently by direct cross-coupling to improve overall display resolution, particularly when the data to be loaded into the adjacent display cells is the same. (emphasis added) (Bae, Col. 4, lines 37-43)

Thus, Bae only discloses that capacitively coupled pixels can share charge to improve resolution, and there is no disclosure or suggestion in Bae of "wherein the pixels include upper and lower pixels adjacent to each other, the second subpixel of the upper pixel is capacitively coupled with the first subpixel of the lower pixel and upon application of the data voltages to the pixels, voltages charged in first and second subpixels of each pixel are

different” as recited in Claim 1, or of “wherein the pixels include upper and lower pixels adjacent to each other, the second subpixel of the upper pixel is capacitively coupled with the first subpixel of the lower pixel and upon application of the modified image signals to the pixels, voltages charged in first and second subpixels of each pixel are different” as recited in Claim 12.

For at least this reason, Applicants respectfully submit independent Claim 1, and all claims depending therefrom are patentable.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. §103(a).

### Conclusion

In view of the remarks set forth above, it is submitted that the application is now in condition for allowance. Authorization is given to charge any fees due or credit any overpayments in regard to this communication to deposit account 50-5029. If the Examiner has any questions or concerns, a telephone call to the undersigned at (408) 331-1674 is welcomed and encouraged.

#### Certification of Electronic Transmission

Certificate of Transmission: I hereby certify that this correspondence is being transmitted to the United States Patent and Trademark Office (USPTO) via the USPTO's EFS-Web electronic system on:

February 28, 2011

Typed or printed name of person signing this certificate:

Signe Holmbeck

/Signe Holmbeck/

Respectfully submitted,

/signe holmbeck/

Signe Holmbeck

Attorney for Applicants

Reg. No. 46,484

Customer No. 90323

#### **Innovation Counsel LLP**

21771 Stevens Creek Boulevard, Suite 200

Cupertino, California 95014

Telephone: (408) 331-1670

Facsimile: (408) 725-8263

E-mail: [sholmbeck@innovationcounsel.com](mailto:sholmbeck@innovationcounsel.com)